

Subject: RE: a Grass Planted at Westpoint Marina Elytrigia, not Paspalum

Date: Thursday, September 22, 2011 2:07 PM

From: Michael Smiley <smiley@bmsdesigngroup.com>

To: Ellen Miramontes <ellenm@bcdc.ca.gov>, Valerie Conant <Conant@bmsdesigngroup.com>

I think we know this is going to be a sensitive subject with Mark. He probably isn't going to want to make the change without definitive evidence from technical experts that the grass is a problem. My reading of some of the e-mails leaves some question about the matter:

- 1) The Texas A&M material is somewhat inconclusive. The writer from A&M seems to actually encourage the use of the plant (based on an application at a golf course). And the introduction of the article indicates that it spreads by rhizomes (not seed).
- 2) The others seem to be saying "err on the safe side." This is not a clear statement. I agree with this approach and Mark may too. But we need to be prepared that he will not agree unless there is more definitive proof.
- 3) Another writer (Baye) suggests this is not the plant Mark says he purchased. So we probably need a conclusive decision on what is there. If we change to an alternative (such as Leymus), will it do as well in the extremely toxic soils out there?

Of course, there is also the question of how the site was constructed, capped and planted. Paragraphs 4 and 5 on page 1 of the Permit #2-02 (amended through 11/1/2006) states:

- "4. Create, use, and maintain a 24-acre upland area by reusing all of the approximately 272,500 cubic yards of the excavated material (the volume of excavated material –545,000 cubic yards—will shrink by 50 percent once dry);
5. Place and use approximately 64,000 cubic yards of imported, clean soil on the upland portion of the site to create a three-foot-deep cap over any bittern impacted material taken to create the marina basin;"

This raises a question as to why we would need plants with such high tolerance to bittern in the first place. I understand we still need salt tolerant plants, but a three-foot-deep cap of good soil should be sufficient for many plants that could tolerate lower toxicity levels. The question is, "Where was this cap placed? Are there drawings that show this?" (Note: by my calculations, 64,000 CY is 13ac at a 3-foot depth). I don't believe we have such drawings, do we Valerie? Were they part of the engineers set submitted to BCDC?

In any case, I agree we should err on the safe side regarding the grasses. We (BMS Design Group) can urge Mark to take this course as long as we are certain we have a clear alternative.

I think, however, it may take a strong and defensible requirement from BCDC. So I suggest, Ellen, that you include your recommendation in your overall evaluation of the plant list and send it simultaneously to Mark and us.

Thanks

Michael Smiley | Partner

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San Francisco Office:
T. (415) 249-0130

From: Ellen Miramontes [mailto:ellenm@bcdcc.ca.gov]
Sent: Thursday, September 22, 2011 11:16 AM
To: Michael Smiley; Valerie Conant
Subject: FW: a Grass Planted at Westpoint Marina Elytrigia, not Paspalum

Michael and Valerie,

Here's information that I received regarding the grass planted at Westpoint Marina. I was not sure if you thought it appropriate for me to provide this information directly to Mark as well. If you would like me to send to him directly as well I can. I will forward one more email to you with additional feedback from the refuge manager. Both recommend removal and replacing with *Leymus triticoides*. I would look into removal techniques closely.

Regards,

--

Ellen Miramontes
Bay Design Analyst
SF Bay Conservation and Development Commission
50 California Street, Suite 2600
San Francisco, California 94111

415-352-3643

<http://www.bcdc.ca.gov/>

----- Forwarded Message

From: baye <baye@earthlink.net>

Reply-To: <baye@earthlink.net>

Date: Thu, 22 Sep 2011 09:50:53 -0700

To: Ellen Miramontes <ellenm@bccdc.ca.gov>

Cc: 'Brenda Grewell' <bjgrewell@ucdavis.edu>, 'Mike Perlmutter' <Mike@BAEDN.org>

Subject: a Grass Planted at Westpoint Marina *Elytrigia*, not *Paspalum*

Ellen, the Westpoint Marina grass in the photo appears to be *Elytrigia pontica*, not *Paspalum*. *E. pontica* is a Russian wheatgrass that is dominant on some of the levees in Palo Alto due to past plantings. It is also invasive in subsaline soils, and used to be planted on levees around the bay for erosion control. It's locally abundant and invasive at Corte Madera, Mare Island, and Palo Alto, and turns up in Suisun Marsh. This planting seems to be suffering from more than drought or salinity; it is normally evergreen! I know the new levees at Westpoint Marina have a lot of acid sulfate accumulated from oxidation of sulfidic deep muds. This is typical of that soil problem, which usually diminishes after about 4-5 years. It can be treated with lime.

There is a perfectly suitable and superior (horticulturally and ecologically) native alternative to Russian wheatgrass that provides superior esthetics, erosion control, and year-round green cover that spreads by itself and forms tough, erosion-resistant, low-maintenance sods: creeping wildrye, *Leymus triticoides*. It takes a few years to form a continuous sod, and can be oversown with temporary cover grasses that are already ubiquitously naturalized along the bay edge (though non-native), like inexpensive ryegrass (*Lolium*, similar in appearance to *Elytrigia*). (Note: that pragmatic adaptation for ornamental horticulture will not likely be recommended by restoration practitioners or exotic plant control advisors, but it may be considered "harm reduction" where the alternative is an existing stand of *Elytrigia*! No *Lolium* invasions will be fueled by a temporary cover crop at the marina; *Lolium* invasion is not seed-limited in S Bay.) When vigorous, closed stands are mature, *Leymus* can outcompete nearly all of the typical weeds of S Bay levees.

Local *Leymus* sources are best, but there are silvery-leaved forms from the N Bay and Suisun that can be used as ornamentals in situations like this, as a less damaging alternative to plants like *Elytrigia*. Creeping wildrye is also tolerant of acid sulfate soils – it was the first plant to recover on Marin Audubon's acid sulfate-affected new levee at Petaluma Marsh Expansion Project. If the owners are dissatisfied with the dead-straw appearance of their planting, I would recommend liming, removing Russian wheatgrass, and replanting with plugs of creeping wildrye. The Watershed Nursery in Richmond is growing it in bulk, and there may be some native plant nurseries in the south bay that have it.

From: Ellen Miramontes [mailto:ellenm@bcdcc.ca.gov]
Sent: Wednesday, September 21, 2011 3:46 PM
To: baye@earthlink.net
Cc: 'Brenda Grewell'
Subject: Re: Question Regarding a Grass Planted at Westpoint Marina

Peter,

Thank you for your quick response. Apparently the marina owner got the recommendation to use this grass from someone at UC Davis – I don't know who, perhaps someone within the Horticulture Department there. So I am curious to hear what you might think, Brenda, about the use of the grass. I am also wondering what both of your recommendations might be for removal of the grass that has already been planted there without our approval (see attached photo).

Thank you,

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On 9/21/11 1:26 PM, "baye" <baye@earthlink.net> wrote:

Ellen, good call . *Paspalum vaginatum* is highly invasive in wetlands and wetland-terrestrial ecotones in its exotic range, including S California. It's highly inappropriate to introduce it to SF Bay, especially with climate warming trends. I'm forwarding this to Brenda Grewell, invasive plant and tidal marsh expert with USDA-ARS; hope you don't mind. I think she'll verify the unacceptable risk. I hope you can influence the landowners . PB

From: Ellen Miramontes [mailto:ellenm@bcdcc.ca.gov]
Sent: Wednesday, September 21, 2011 10:36 AM

To: baye@earthlink.net

Subject: FW: Question Regarding a Grass Planted at Westpoint Marina

Peter,

I would like to find out if you know anything about the grass mentioned in my email below. It is called Seashore Paspalum and has been planted at the Westpoint Marina in Redwood City.

I saw you speak at the conference yesterday regarding Aramburu Island but was not able to catch you afterwards. I would appreciate any feedback or information you have.

Thank you,

----- End of Forwarded Message

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Subject: RE: a Grass Planted at Westpoint Marina Elytrigia, not Paspalum

Date: Thursday, September 22, 2011 11:49 AM

From: baye <baye@earthlink.net>

Reply-To: <baye@earthlink.net>

To: Ellen Miramontes <ellenm@bcdcc.ca.gov>

And I'm very grateful you brought it up! Glad to help redirect away from another needless point of invasion. This is how they start! I'm amazed at how many invasions are from planting the wrong species, including restoration projects without careful control of plant identification! Quite a few cases of inadvertent introduction of invasive exotics with restoration, alas.

I should have mentioned: planting time for Leymus is in cool, wet, early winter or late fall – soils fully moistened, cool air temperatures. They leaf out in winter, and spread roots in winter; late start in spring gives advantage to weeds. Spring planting is NOT a good idea, even with irrigation (irrigation during the spring supports weeds more than plantings).

Joint Venture funded a tidal marsh ecotone vegetation stewardship guideline report I wrote for Marin Audubon in 2008 – it has some more info on Leymus. <http://www.marinaudubon.org/pdf/MAS%20tidemarsh%20ecotone%20veg%20mgmt%20final%202008-3.pdf>. More information is in the appendices, but I don't have the link handy.

PB

From: Ellen Miramontes [mailto:ellenm@bcdcc.ca.gov]

Sent: Thursday, September 22, 2011 10:50 AM

To: baye@earthlink.net

Subject: Re: a Grass Planted at Westpoint Marina Elytrigia, not Paspalum

Peter,

Thank you very much for the information. I will recommend that the project owners remove this grass and replace with Leymus triticoides. I really appreciate your expertise with this.

Thank you,

--

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